

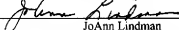
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application No.:	10/616,785	Confirmation No.:	2009
Applicant :	Lawrence Wasicek		
Filed :	July 10, 2003		
TC/A.U. :	3731		
Examiner :	Nguyen, Vi X		
Title :	EMBOLIC PROTECTION FILTERING DEVICE		
Docket No. :	1001.1693101		
Customer No. :	28075		

**APPEAL BRIEF FILED UNDER 37 C.F.R. § 41.37**

Mail Stop Appeal Brief - Patents  
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By   
JoAnn Lindman

Dear Sirs:

Pursuant to 37 C.F.R. § 41.37, Appellant hereby submits this Appeal Brief in furtherance of the Notice of Appeal filed on August 24, 2010, and of the Notice of Panel Decision from Pre-Appeal Review dated mailed September 28, 2010. Appellant authorizes the fee prescribed by 37 C.F.R. § 41.20(b)(2) in the amount of \$540 to be charged to Deposit Account No. 50-0413. Permission is hereby granted to charge or credit Deposit Account No. 50-0413 for any errors in fee calculation.

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**I. REAL PARTY IN INTEREST**

The real party in interest is the assignee of record, Boston Scientific Scimed, Inc., a corporation organized and existing under and by virtue of the laws of Minnesota, and having a business address of One Scimed Place, Maple Grove, MN 55311-1566. An assignment from the inventor, Lawrence Wasicek, conveying all right, title and interest in the invention to Scimed Life Systems, Inc. has been recorded at Reel 014273, Frame 0337. A change of name to Boston Scientific Scimed, Inc. has been recorded at Reel 018505, Frame 0868.

**II. RELATED APPEALS AND INTERFERENCES**

There are no other known appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS**

Claims 1-46, are pending in the application of which claims 9, 16-18, 22, 23, 30-32, and 35-37 have been withdrawn. Claims 41-43 have been canceled from the application.

Claims 1, 4-7, 10, 13, 20, 21, 24, 27, 34, 38-40, and 44-46 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Daniel et al., U.S. Patent No. 6,171,327.

Claims 2, 3, 6, 11-12, and 25-26 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Daniel et al., U.S. Patent No. 6,171,327, in view of Stevens et al., U.S. Patent No. 6,029,671.

Claims 8, 14, 15, 19, 28, 29, and 33 were not explicitly rejected; however discussion of those claims in the Final Office Action of April 27, 2010 suggests that the Examiner intended to reject those claims over Daniel et al., U.S. Patent No. 6,171,327 under 35 U.S.C. § 103(a) and they will be treated accordingly.

Claims 1-8, 10-15, 19-21, 24-29, 33, 34, 38-40, and 44-46 of the application are currently being appealed.

#### **IV. STATUS OF AMENDMENTS**

No amendments subsequent the final rejection of April 27, 2010 have been presented.

#### **V. SUMMARY OF CLAIMED SUBJECT MATTER\***

The invention relates generally to medical devices comprising an elongate shaft including a proximal shaft section, a distal shaft section, a connector connecting the proximal shaft section to the distal shaft section, and a filter connected to the shaft. In some embodiments, the proximal shaft section and the distal shaft section comprise different materials. In some embodiments, the proximal shaft section and the distal shaft section have different flexibilities.

Turning now to independent claim 1, which is directed to a medical device, comprising: an elongate shaft (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a longitudinally extending proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) having a distal end, a longitudinally extending distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1

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\* The references to the specification and drawings provided herein are exemplary, and are not deemed to be limiting as support may be found throughout the specification and in many of the Figures.

to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) having a proximal end, and a connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) connecting the proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and the distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) of the elongate shaft (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), wherein the connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) is fixedly secured to both the proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and the distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1

to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), securing the distal end of the proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) with the proximal end of the distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528); and a filter (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) coupled to the shaft (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12).

Turning now to independent claim 10, which is directed to an embolic protection filtering device, comprising: a filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the core member including a proximal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326,

526) and a distal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), the proximal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) comprising a first material and including a distal end, the distal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) comprising a second material different from the first material and including a proximal end; a connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) disposed over the distal end of the proximal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and the proximal end of the distal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), the connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page

11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) fixedly secured to each of the proximal and distal regions of the core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12); and a filter assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) coupled to the filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the filter assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) including a filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18) and a filter membrane (see, for example, specification page 5, lines 15-17; Fig. 1; reference numeral 16) coupled to the filter (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14).

Turning now to independent claim 24, which is directed to an embolic protection filtering device, comprising: a filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) and a covering (see, for example, specification page 6, lines 9-13; Fig. 1; reference numeral 22) disposed over at least a portion of the core member (see, for example, specification page 2, lines 3-5 and 13-16,



page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a proximal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and a distal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), the proximal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) having a first flexibility and including a distal end, the distal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) having a second flexibility different from the first flexibility and including a proximal end; a connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) disposed over the distal end of

the proximal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and the proximal end of the distal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), the connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) fixedly secured to each of the proximal and distal portions of the core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12); and a filter assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) coupled to the filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the filter assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) including a filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18), a filter membrane (see, for example, specification page 5, lines 15-17; Fig. 1; reference numeral 16) coupled to the filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18), and one or more struts (see, for example, specification page 6, lines 9-13; Fig. 1; reference numeral 22) extending between the

filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18) and the filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12).

Turning now to independent claim 39, which is directed to an embolic protection filtering device, comprising: a filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) and a covering (see, for example, specification page 6, lines 14-16, page 11, line 4 to page 13, line 16, page 24, lines 20-21; Figs. 2 and 8; reference numeral 32, 432) disposed over at least a portion of the core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a proximal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and a distal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to

page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), the proximal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) comprising a first material and including a distal end, the distal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) comprising a second material different from the first material and including a proximal end; means see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) for securing the proximal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) with the distal region (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528); and a filter assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) coupled to the filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18,

lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the filter assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) including a filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18), a filter membrane (see, for example, specification page 5, lines 15-17; Fig. 1; reference numeral 16) coupled to the filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18), and one or more struts (see, for example, specification page 6, lines 9-13; Fig. 1; reference numeral 22) extending between the filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18) and the filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12).

Turning now to independent claim 40, which is directed to an embolic protection filtering device, comprising: a filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) and a covering (see, for example, specification page 6, lines 14-16, page 11, line 4 to page 13, line 16, page 24, lines 20-21; Figs. 2 and 8; reference numeral 32, 432) disposed over at least a portion of the core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the core member (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12).

12) including a proximal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and a distal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), the proximal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) having a first flexibility and including a distal end, the distal portion (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) comprising a second flexibility different from the first flexibility and including a proximal end; means (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 20, page 22, line 1 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 370 530, 558) for blending the first flexibility with the second flexibility; and a filter assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) coupled to the filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), the filter

assembly (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) including a filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18), a filter membrane (see, for example, specification page 5, lines 15-17; Fig. 1; reference numeral 16) coupled to the filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18), and one or more struts (see, for example, specification page 6, lines 9-13; Fig. 1; reference numeral 22) extending between the filter frame (see, for example, specification page 5, line 15 to page 6, line 14; Fig. 1; reference numeral 18) and the filter wire (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12).

Turning now to independent claim 44, which is directed to a method of using a medical device, comprising: providing a filtering device (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14), the filtering device (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) including an elongate shaft (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) having a filter (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) coupled thereto, the shaft (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12) including a longitudinally extending proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17,

line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) having a distal end, a longitudinally extending distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) having a proximal end, and a connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 17, page 22, line 20 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 530, 558) connecting the proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and the distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528) of the shaft (see, for example, specification page 2, lines 3-5 and 13-16, page 5, lines 7-14, page 6, lines 9-19, page 8, lines 6-11, page 10, line 13 to page 11, line 2, page 12, line 15 to page 13, line 16, page 14, lines 18-19, page 17, lines 1-12, page 18, lines 3-4, page 19, lines 2-6; Figs 1; reference numeral 12), wherein the connector (see, for example specification page 2, lines 15-16, page 6, lines 14-16, page 10, line 20 to page 11, line 10, page 14, line 6 to page 15, line 9, page 17, lines 3-6, page 18, line 3 to page 20, line 17, page 22, line 20 to page 24, line 19, page 26, line 15 to page 27, line 1; Figs. 2-9; reference numeral 30, 230, 330, 530, 558) is fixedly secured to both the proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14,



line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) and the distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528), securing the distal end of the proximal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, line 14 to page 7, line 16, page 9, lines 11-12, page 10, lines 6-8, page 11, lines 8-10, page 14, line 2-10, page 15, lines 7-9, page 17, line 1 to page 20, line 6, page 22, line 20 to page 24, line 3, page 26, line 18 to page 27, line 5; Figs. 2-9; reference numeral 26, 126, 226, 326, 526) with the proximal end of the distal section (see, for example specification page 2, lines 15-16, page 3, lines 6-15, page 6, lines 14-19, page 7, lines 8-16, page 9, line 11 to page 10, line 10, page 11, lines 4-5, page 12, line 11 to page 13, line 1, page 14, lines 2-10, page 15, lines 7-9, page 17, line 1 to page 18, line 7 and line 22 to page 20, line 6, page 22, line 20 to page 24, line 19, page 25, line 22 to page 27, line 5; Figs. 2-9; reference numerals 28, 128, 228, 328, 528); inserting the filtering device into a blood vessel; advancing the filtering device (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14) through the blood vessel to a location adjacent a target region; and deploying the filter (see, for example, specification page 2, lines 13-15, page 5, line 7 to page 6, line 6, page 10, line 18 to page 11, line 3; Figs. 1, 2, 8, 9; reference numeral 14).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 1, 4-7, 10, 13, 20, 21, 24, 27, 34, 38-40, and 44-46 are patentable over Daniel et al., U.S. Patent No. 6,171,327, under 35 U.S.C. § 103(a).

Whether claims 2, 3, 6, 11-12, and 25-26 are patentable over Daniel et al., U.S. Patent No. 6,171,327, in view of Stevens et al., U.S. Patent No. 6,029,671 under 35 U.S.C. § 103(a).

Whether claims 8, 14, 15, 19, 28, 29, and 33 are patentable over Daniel et al., U.S. Patent No. 6,171,327, under 35 U.S.C. § 103(a).

## VII. ARGUMENT

- A. CLAIMS 1, 4-7, 10, 13, 20, 21, 24, 27, 34, 38-40, AND 44-46 ARE PATENTABLE OVER DANIEL ET AL., U.S. PATENT NO. 6,171,327 UNDER 35 U.S.C. § 103(a).

1. *All words in a claim must be considered in judging the patentability of that claim against the prior art.*

Nowhere does Daniel disclose “a connector connecting the proximal section and the distal section of the elongate shaft, wherein the connector is fixedly secured to both the proximal section and the distal section ... and a filter coupled to the shaft” as recited in independent claim 1 and, *mutatis mutandis*, in independent claims 10, 24, 39, and 40.

The rejections of independent claims 1, 10, 24, 39, 40, and 44 depend upon the Examiner’s erroneous assertion that Daniel teaches a filter 21 “coupled to” shaft 112 in Fig. 9 and that catheter 112, as illustrated in Fig. 4 of Daniel, has a connector connecting the proximal section and the distal section of the shaft to which the filter is coupled. Although Daniel does refer to catheter 112 as “including an elongate shaft”, at no time does the disclosure of Daniel indicate that filter 21 may be attached to catheter 112 instead of to wire 26. As disclosed by Daniel:

“Filter 21, including membrane 22 and frame 24 are attached to a wire 26 which extends the length of catheter 12. The proximal end of filter 21 is connected to wire 26 by two or more tails 28 extending from frame 24 to a stop 29. Stop 29 can be a clamp or wire winding, solder or other connector. At the distal end of filter 21, membrane 22 may be adhered to wire 26 by a suitable adhesive such as, for example, cyanoacrylates.” (Col. 4, lines 29-36; emphasis added.)

Pertinent Figs. 2-4 and 9 of Daniel are reproduced below for convenience:

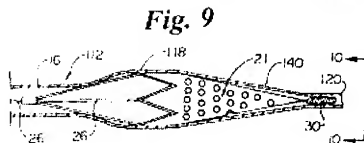
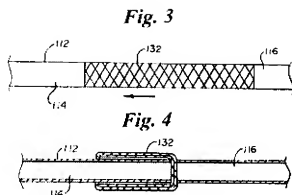
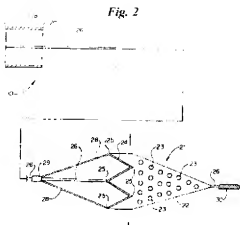


Fig. 2 of Daniel illustrates filter 21, connected to and/or adhered to wire 26 and slidably receivable within filter housing 18 disposed at the distal end of delivery catheter 12. (Col. 3, lines 58-59 and col. 4, lines 29-36 quoted above.) Figs. 3 and 4 of Daniel illustrate a shaft of a delivery catheter 112 for filter 21 which includes a collapsible portion 132 depicted in extended and collapsed configurations respectively. As described at col. 5, line 57 to col. 6, line 6, the collapsible section 132 can be collapsed to shorten the overall length of catheter 112 as the catheter is withdrawn from wire 26 and filter 21 prior to the removal of catheter 112. This allows a physician to grasp wire 26 at all times during removal of catheter of 112. Fig. 9 of Daniel is discussed at col. 6, lines 46-62 which states in part:

"Once housing 118 and filter 21 are positioned distally to the treatment site, filter 21 can be deployed by withdrawing housing 118 proximally."

In the Advisory Action, the Examiner acknowledges:

"Daniel, fig. 4 is silent regarding a filter coupled to the shaft."

Indeed, the only relationship between filters 21 and 121 and delivery catheters 12 or 112 which is taught by Daniel is that the filters 21 and 121 may be contained within

filter housings 18 or 118, attached to the distal ends of catheters 12 or 112, for delivery within the body.

The Examiner incorrectly characterizes Fig. 4 of Daniel:

“Daniel teaches a filter 21 coupled to the shaft (fig. 9, element 112).”

As will be seen in Fig. 9 above, the filter 21 is connected to wire 26 and is contained for delivery within filter housing 118 attached to the distal end of catheter 112. As illustrated, there is no contact between the filter 21 and the catheter 112 as those elements are designated in Fig. 9. (There appears to be incidental contact between struts 28 of the filter 21 and the transitional region between the distal end of the delivery catheter 112 and housing 118 attached thereto, said housing 118 containing filter 21 for delivery to the vessel.) At no time does Daniel teach a filter 21 “coupled to” catheter 112.

In making the erroneous assertion that Daniel teaches a filter coupled to shaft 112 in Fig. 9, Examiner is either unclear that the filter is coupled instead to wire 26 in Fig. 9, as is taught by Daniel, or is relying upon an incorrect interpretation of the term “coupled to”.

Although the Examiner has cited “Merriam-Webster online dictionary as an authority for the assertion that: ‘The phrase “a filter coupled to the shaft” in the claim is broad enough to mean “something that joints [*sic*], or links, or engages two things together”’, the entry cited appears to be for the noun “couple”:

noun: “3: something that joins or links two things together”

(Merriam-Webster's Online Dictionary, 11th Edition; October 15, 2010)

Note that the term engaged appears only in an alternate sense of couple used as a noun:

“1: two persons married, engaged”

The definition for the transitive verb “couple”, having inflected form “coupled”, as of October 15, 2010, reads:

1 a : to connect for consideration together b : to join for combined effect

2 a : to fasten together

(Merriam-Webster's Online Dictionary, 11th Edition)

“Where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the

proper meanings.” *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998)

In addition several courts have ruled on the term, for example:

“The Court construes the phrase “coupled to” to have its plain and ordinary meaning, which is “directly connected to or attached to.” *See e.g.* Webster’s Ninth New Collegiate Dictionary 298 (1991) (defining “couple” to mean: to connect for consideration together); [Acacia Media Techs. Corp. v. New Destiny Internet Group, 2004 U.S. Dist. (C.D. Cal. July 12, 2004)]

Here, the ordinary meaning of “coupled to” is clear in the context of the specification as it would be interpreted by one of ordinary skill in the art.

“Filtering device 10 includes an elongate shaft 12 having an embolic protection filter 14 coupled thereto.” (Page 5, lines 7-8.)

“One or more struts 22 may extend between frame 18 and shaft or filter wire 12 and be coupled to filter wire 12 by a coupling 24.” (Page 6, lines 9-10.)

In the pending claims, the filter is “fastened to” that shaft which includes the recited connector. The shaft 26 of Daniel, to which the filter 21 is connected and/or adhered does not include “a connector connecting the proximal section and the distal section of the elongate shaft, wherein the connector is fixedly secured to both the proximal section and the distal section”, as recited in the independent claims. Nothing Daniel teaches that the filter may be “fastened to” catheter 112 and not “fastened to” shaft 26. Indeed, the deployment function provided by the housings 18, 118 of catheters 12, 112 teaches away from the interpretation advanced by the Examiner in which the filter of Daniels would be attached to the interior of housing 18, 118 by means of a “joint or link” thereby rendering the filter incapable of deploying upon withdrawal of the distal delivery housing 18 or 118.

Mounting the filter of Daniel on the exterior of the delivery catheter 112 or within the housing 118 of delivery catheter 112 of Daniel as suggested by the Examiner would render delivery catheter 112 and the collapsible section 132 of the filter delivery system of Daniel unsatisfactory for its intended purpose of delivering the compressed filter 21 by allowing the braided section 132 to be drawn tight for removal from the wire 26 and filter

21 while allowing the wire 26 to be grasped by a physician at all times during the removal of the catheter 112. (MPEP 2143.01 Part V.) Collapse of the braided section 132 would displace the filter proximally without delivering it. The delivery system of Daniel does not teach mounting a filter on a delivery system capable of deploying the filter and mounting the filter inside of the housing 118 of delivery catheter 112 would appear to preclude delivery of the filter. Further, the modification would impermissibly alter the principle of operation of Daniel in which a collapsible braided section 132 allows the delivery catheter to be shortened to facilitate removal of the delivery catheter 112 from the shaft 26 and filter 21. (MPEP 2143.01 Part VI.) Note that removal of delivery catheter 112 from a filter delivery system of Daniel as interpreted by the Examiner to include the filter 21 disposed on catheter 112, would appear to leave the filter detached within the body and/or arguably undeployed within housing 118.

Daniel does not teach all the claim limitations of the independent claims 1, 10, 24, 39, 40, and 44 as is required to establish a *prima facie* case of obviousness and one of ordinary skill in the art would not be motivated to couple the filter 21 of Daniel to the filter housing 118 of delivery catheter 112 thereby rendering the delivery catheter unsatisfactory as a delivery system for filter 21. Further the proposed modified system of Daniel does not allow subsequent removal of the catheter 112 to deploy the filter 21. No motivation has been provided for the inclusion of a connector braid 132 between proximal and distal sections of wire 26 to allow shortening thereof. Appellant respectfully requests that the rejection of independent claims 1, 10, 24, 39, 40, and 44 be overruled.

2. *If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious.*

Claims 4-7, 13, 20, 21, 27, 34, 38, 45, and 46, which depend from nonobvious independent claims 1, 10, and 24 respectively, also are believed to be unobvious and Appellant respectfully requests that the rejection be overruled.

B. CLAIMS 2, 3, 6, 11-12, AND 25-26 ARE PATENTABLE OVER  
DANIEL ET AL., U.S. PATENT NO. 6,171,327, IN VIEW OF

As noted above, independent claims 1, 10, and 24 are nonobvious over Daniel. The addition of Stevens, said to disclose a proximal section having a first flexibility and a distal section having a second flexibility, does not overcome the deficiencies of Daniel as applied to independent claims 1 and 10, which do not include that limitation. With respect to claim 24 which does include the limitation, it should be noted that the disclosure of Stevens does not appear to overcome the remaining deficiencies of Daniel as discussed above. Further, Stevens does not appear to explicitly disclose that the two shaft segments necessarily have different flexibilities as a result of the selection of different materials for the two shaft segments. One of ordinary skill in the art would be aware that the flexibility of an element is a function of both the material and the geometry of the element in question and that a difference in composition does not necessarily result in a difference in flexibility which would be recognized as inherently present by one of ordinary skill in the art. (MPEP 2112.)

Flexibility, the inverse of stiffness, may be computed as the length of the member divided by the product of the modulus of elasticity and the second moment of area. Thus a unit length beam having a first modulus of elasticity may have the same flexibility as, for example a unit length beam having a different modulus of elasticity, but with a compensating second moment of area. Similarly, the flexibility of the beams may be matched by altering the relative lengths and/or by altering the relative lengths, moduli of elasticity, and second moments of area simultaneously. Thus a mere change in material is insufficient to necessarily (inherently) disclose a difference in flexibility.

For at least these reasons, Daniel in view of Stevens does not appear to disclose all the claim limitations of independent claims 1, 10, and 24, as is required to establish a *prima facie* case of obviousness.

Accordingly claims 2, 3, 6, 11, 12, 25, and 26, which depend from nonobvious independent claims 1, 10, and 24 respectively, are also believed to be nonobvious and Appellant respectfully requests that the rejections be overruled.

C. CLAIMS 8, 14, 15, 19, 28, 29, AND 33 ARE PATENTABLE OVER DANIEL ET AL., U.S. PATENT NO. 6,171,327 UNDER 35 U.S.C. § 103(a).

Claims 8, 14, 15, 19, 28, 29, and 33, which depend from nonobvious independent claims 1, 10, and 24 respectively, also are believed to be unobvious and Appellant respectfully requests that the rejection be overruled.

D. CONCLUSION

For the reasons stated above, claims 1, 4-7, 10, 13, 20, 21, 24, 27, 34, 38-40, and 44-46 are nonobvious over Daniel et al., U.S. Patent No. 6,171,327; claims 2, 3, 6, 11-12, and 25-26 are nonobvious over Daniel et al., U.S. Patent No. 6,171,327 in view of Stevens et al., U.S. Patent No. 6,029,671; claims 8, 14, 15, 19, 28, 29, and 33 are nonobvious over Daniel et al., U.S. Patent No. 6,171,327; and the Examiner's rejections of claims 1-8, 10-15, 19-21, 24-29, 33, 34, 38-40, and 44-46 under 35 U.S.C § 103 should be overruled.

Date: Oct 26, 2010

Respectfully submitted,

  
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## **VIII. CLAIMS APPENDIX**

1. A medical device, comprising:  
an elongate shaft including a longitudinally extending proximal section having a distal end, a longitudinally extending distal section having a proximal end, and a connector connecting the proximal section and the distal section of the elongate shaft, wherein the connector is fixedly secured to both the proximal section and the distal section, securing the distal end of the proximal section with the proximal end of the distal section; and  
a filter coupled to the shaft.
2. The medical device of claim 1, wherein the proximal section comprises a first material and the distal section comprises a second material that is different from the first material.
3. The medical device of claim 2, wherein the first material comprises stainless steel and the second material includes nickel-titanium alloy.
4. The medical device of claim 2, wherein the connector comprises a third material that is compatible for bonding to both the first and second material.
5. The medical device of claim 2, wherein the connector is welded to both the first material and to the second material.
6. The medical device of claim 2, wherein the first material has a first flexibility and the second material has a second flexibility that is more flexible than the first flexibility.
7. The medical device of claim 6, wherein the connector blends the first flexibility with the second flexibility.

8. The medical device of claim 1, wherein the connector is disposed over the distal end of the proximal section and the proximal end of the distal section.

9. The medical device of claim 1, further comprising a bismuth alloy connecting material disposed adjacent the connector.

10. An embolic protection filtering device, comprising:  
a filter wire including a core member, the core member including a proximal region and a distal region, the proximal region comprising a first material and including a distal end, the distal region comprising a second material different from the first material and including a proximal end;

a connector disposed over the distal end of the proximal region and the proximal end of the distal region, the connector fixedly secured to each of the proximal and distal regions of the core member; and

a filter assembly coupled to the filter wire, the filter assembly including a filter frame and a filter membrane coupled to the filter.

11. The filtering device of claim 10, wherein the first material comprises stainless steel.

12. The filtering device of claim 10, wherein the second material comprises nickel-titanium alloy.

13. The filtering device of claim 10, wherein the connector comprises a third material different from the first material and the second material, the third material being compatible for bonding to both the first and second material.

14. The filtering device of claim 13, wherein the third material comprises a nickel-chromium alloy.

15. The filtering device of claim 10, wherein a reduced cross sectional area is defined adjacent at least one of the distal end of the proximal region and the proximal end of the distal region.

16. The filtering device of claim 15, wherein the reduced size portion or portions include a taper.

17. The filtering device of claim 15, wherein both the proximal region and the distal region include a reduced size portion, and wherein the reduced size portion of the proximal region and the reduced size portion of the distal region overlap.

18. The filtering device of claim 15, wherein both the proximal region and the distal region include a reduced size portion, and wherein the reduced size portion of the proximal region and the reduced size portion of the distal region have interlocking shapes.

19. The filtering device of claim 15, wherein both the proximal region and the distal region include a reduced cross sectional area, and wherein the reduced cross sectional area of the proximal region and the reduced cross sectional area of the distal region are joined together to define a butt joint.

20. The filtering device of claim 10, wherein the device further comprises a covering over a portion of the core member.

21. The filtering device of claim 20, wherein the covering comprises a polymer sheath.

22. The filtering device of claim 22, wherein the covering comprises a coil.

23. The filtering device of claim 10, wherein the distal region of the core member include a first section and a second section that are connected by a second connector.

24. An embolic protection filtering device, comprising:  
a filter wire including a core member and a covering disposed over at least a portion of the core member, the core member including a proximal portion and a distal portion, the proximal portion having a first flexibility and including a distal end, the distal portion having a second flexibility different from the first flexibility and including a proximal end;

a connector disposed over the distal end of the proximal portion and the proximal end of the distal portion, the connector fixedly secured to each of the proximal and distal portions of the core member; and

a filter assembly coupled to the filter wire, the filter assembly including a filter frame, a filter membrane coupled to the filter frame, and one or more struts extending between the filter frame and the filter wire.

25. The filtering device of claim 24, wherein the proximal portion comprises stainless steel.

26. The filtering device of claim 24, wherein the distal portion comprises nickel-titanium alloy.

27. The filtering device of claim 24, wherein the connector comprises a connector material that is compatible for bonding to both the proximal and distal portions.

28. The filtering device of claim 27, wherein the connector material comprises a nickel-chromium alloy.

29. The filtering device of claim 24, wherein a reduced cross sectional area is defined adjacent at least one of the distal end of the proximal portion and the proximal end of the distal portion.

30. The filtering device of claim 29, wherein the reduced size region or regions include a taper.

31. The filtering device of claim 29, wherein both the proximal portion and the distal portion include a reduced size region, and wherein the reduced size region of the proximal portion and the reduced size region of the distal portion overlap.

32. The filtering device of claim 29, wherein both the proximal portion and the distal portion include a reduced size region, and wherein the reduced size region of the proximal portion and the reduced size region of the distal portion have interlocking shapes.

33. The filtering device of claim 29, wherein both the proximal portion and the distal portion include a reduced cross sectional area, and wherein the reduced cross sectional area of the proximal portion and the reduced cross sectional area of the distal portion are joined together to define a butt joint.

34. The filtering device of claim 24, wherein the covering comprises a polymer sheath.

35. The filtering device of claim 24, wherein the covering comprises a coil.

36. The filtering device of claim 24, wherein the distal region of the core member include a first section and a second section that are connected by a second connector.

37. The filtering device of claim 24, further comprising a bismuth alloy connector material disposed adjacent the distal end of the proximal portion and the proximal end of the distal portion.

38. The filtering device of claim 24, wherein the connector is welded to the proximal portion and to the distal portion.

39. An embolic protection filtering device, comprising:  
a filter wire including a core member and a covering disposed over at least a portion of the core member, the core member including a proximal region and a distal region, the proximal region comprising a first material and including a distal end, the distal region comprising a second material different from the first material and including a proximal end;

means for securing the proximal region with the distal region; and

a filter assembly coupled to the filter wire, the filter assembly including a filter frame, a filter membrane coupled to the filter frame, and one or more struts extending between the filter frame and the filter wire.

40. An embolic protection filtering device, comprising:  
a filter wire including a core member and a covering disposed over at least a portion of the core member, the core member including a proximal portion and a distal portion, the proximal portion having a first flexibility and including a distal end, the distal portion comprising a second flexibility different from the first flexibility and including a proximal end;

means for blending the first flexibility with the second flexibility; and

a filter assembly coupled to the filter wire, the filter assembly including a filter frame, a filter membrane coupled to the filter frame, and one or more struts extending between the filter frame and the filter wire.

41-43. (Cancelled)

44. A method of using a medical device, comprising:  
providing a filtering device, the filtering device including an elongate shaft having a filter coupled thereto, the shaft including a longitudinally extending proximal section having a distal end, a longitudinally extending distal section having a proximal end, and a connector connecting the proximal section and the distal section of the shaft, wherein the connector is fixedly secured to both the proximal section and the distal section, securing the distal end of the proximal section with the proximal end of the distal section;  
inserting the filtering device into a blood vessel;  
advancing the filtering device through the blood vessel to a location adjacent a target region; and  
deploying the filter.

45. The medical device of claim 1, wherein the filter is disposed proximal to the connector.

46. The medical device of claim 1, wherein the filter is disposed distal to the connector.

**IX. EVIDENCE APPENDIX**

No additional evidence has been presented.



X. **RELATED PROCEEDINGS APPENDIX**

None.